

# **California Board of Registered Nursing**

## **2011-2012 Annual School Report**

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### **Data Summary and Historical Trend Analysis**

A Presentation of Pre-Licensure Nursing Education Programs in California

### **Inland Empire**

Orange, Riverside and San Bernardino Counties

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Prepared by:  
Alissa Totman, BS  
Renaë Waneka, MPH  
Tim Bates, MPP  
Joanne Spetz, PhD  
University of California, San Francisco  
3333 California Street, Suite 265  
San Francisco, CA 94118

## INTRODUCTION

Each year, the California Board of Registered Nursing (BRN) requires all pre-licensure registered nursing programs in California to complete a survey detailing statistics of their programs, students and faculty. The survey collects data from August 1 through July 31. Information gathered from these surveys is compiled into a database and used to analyze trends in nursing education.

The BRN commissioned the University of California, San Francisco (UCSF) to conduct a historical analysis of data collected from the 2001-2002 through the 2011-2012 survey. In this report, we present ten years of historical data from the BRN Annual School Survey. Data analyses were conducted statewide and for nine economic regions<sup>1</sup> in California, with a separate report for each region. All reports are available on the BRN website (<http://www.rn.ca.gov/>).

This report presents data from the Inland Empire, which includes Orange, Riverside and San Bernardino counties. All data are presented in aggregate form and describe overall trends in the areas and over the times specified and, therefore, may not be applicable to individual nursing education programs. Additional data from the past ten years of the BRN Annual School Survey are available in an interactive database on the BRN website.

Beginning with the 2011-2012 Annual School Survey, certain questions were revised to allow schools to report data separately for satellite campuses located in regions different from their home campus. This change was made to more accurately report student and faculty data by region, but it has the result that data which were previously reported in one region are now being reported in a different region. This is important because changes in regional totals that appear to signal either an increase or a decrease may in fact be the result of a program reporting satellite campus data in a different region. Data tables impacted by this change will be footnoted. In these instances, comparing 2011-2012 data to the previous year is not recommended. When regional totals include satellite campus data from a program whose home campus is located in a different region, it will be listed in Appendix A.

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<sup>1</sup> The nine regions include: (1) Northern California, (2) Northern Sacramento Valley, (3) Greater Sacramento, (4) Bay Area, (5) San Joaquin Valley, (7) Central Coast, (8) Los Angeles Area (Los Angeles and Ventura counties), (9) Inland Empire (Orange, Riverside, and San Bernardino counties), and (10) Southern Border Region. Counties within each region are detailed in the corresponding regional report. The Central Sierra (Region 6) does not have any nursing education programs and was, therefore, not included in the analyses.

## DATA SUMMARY AND HISTORICAL TREND ANALYSIS<sup>2</sup>

This analysis presents pre-licensure program data from the 2010-2011 BRN School Survey in comparison with data from previous years of the survey. Data items addressed include the number of nursing programs, enrollments, completions, retention rates, NCLEX pass rates, new graduate employment, student and faculty census data, the use of clinical simulation, availability of clinical space, and student clinical practice restrictions.

### Trends in Pre-Licensure Nursing Programs

#### *Number of Nursing Programs*

In 2011-2012, the Inland Empire had a total of 23 pre-licensure nursing programs. Of these programs, 12 are ADN programs, 9 are BSN programs, and two are ELM programs. This represents the loss of two private ADN programs since the previous year. Approximately two-thirds (65.2%) of pre-licensure nursing programs in the region are public.

#### Number of Nursing Programs

	<i>Academic Year</i>									
	<i>2002-2003</i>	<i>2003-2004</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
<b>Total Nursing Programs*</b>	<b>12</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>17</b>	<b>19</b>	<b>24</b>	<b>25</b>	<b>25</b>	<b>23</b>
ADN	10	10	11	11	11	12	14	14	14	12
BSN	2	2	2	3	5	5	8	9	9	9
ELM					1	2	2	2	2	2
Public	11	11	12	12	15	15	15	15	15	15
Private	1	1	1	2	2	4	9	10	10	8
Total Number of Schools	12	12	13	14	16	17	20	21	21	21

\*Some schools admit students in more than one program. The number of nursing programs may be greater than the number of nursing schools in the region.

The share of nursing programs that partner with another nursing school to offer a higher degree has been increasing since 2008-2009. 43.5% of Inland Empire nursing programs (n=10) collaborated with another program to offer a higher nursing degree than offered at their own program in 2011-2012.

	<b>Academic Year</b>						
	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
<b>Partnerships*</b>							
Schools that partner with another program that leads to a higher degree	7.1%	11.8%	5.6%	4.5%	8.3%	20.0%	43.5%
Total number of programs	14	17	18	22	24	25	23

\*These data were collected for the first time in 2005-2006.

<sup>2</sup> 2011-2012 data may be influenced by satellite campus data being reported and allocated to their proper region for the first time in the 2011-2012 survey. Tables affected by this change are noted, and we caution the reader against comparing data collected in 2011-2012 with data collected in previous year's surveys.

### *Admission Spaces and New Student Enrollments*

Pre-license nursing programs in the Inland Empire region reported a total 2,582 spaces available for new students in 2011-2012, and these spaces were filled with a total of 2,957 students. Nursing programs in the region have enrolled more students than were spaces available in eight of the past ten years. 65.2% (n=15) of programs reported that they overenrolled students and the most frequently reported reason for doing so was to account for attrition.

#### **Availability and Utilization of Admission Spaces<sup>†</sup>**

	<i>Academic Year</i>									
	<i>2002-2003</i>	<i>2003-2004</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
Spaces Available	1,117	1,127	1,192	1,438	1,643	1,734	2,361	2,984	2,350	2,582
New Student Enrollments	1,117	1,153	1,189	1,519	1,946	1,907	2,496	2,884	2,774	2,957
% Spaces Filled	100.0%	102.3%	99.7%	105.6%	118.4%	110.0%	105.7%	96.7%	118.0%	114.5%

<sup>†</sup>2011-2012 data may be influenced by the allocation of satellite campus data from another region

Inland Empire nursing programs continue to receive more applications requesting entrance into their programs than can be accommodated. In 2011-2012, programs received 6,094 qualified applications, 51.5% (n=3,137) of which were not accepted for admission.

#### **Student Admission Applications<sup>\*†</sup>**

	<i>Academic Year</i>									
	<i>2002-2003</i>	<i>2003-2004</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
<b>Qualified Applications</b>	<b>1,944</b>	<b>3,226</b>	<b>3,245</b>	<b>3,818</b>	<b>3,310</b>	<b>5,412</b>	<b>6,013</b>	<b>8,256</b>	<b>7,178</b>	<b>6,094</b>
Accepted	1,117	1,153	1,189	1,519	1,946	1,907	2,496	2,884	2,774	2,957
Not Accepted	827	2,073	2,056	2,299	1,364	3,505	3,517	5,372	4,404	3,137
% Qualified Applications Not Accepted	42.5%	64.3%	63.4%	60.2%	41.2%	64.8%	58.5%	65.1%	61.4%	51.5%

\*These data represent applications, not individuals. A change in the number of applications may not represent an equivalent change in the number of individuals applying to nursing school.

<sup>†</sup>2011-2012 data may be influenced by the allocation of satellite campus data from another region

Pre-license nursing programs in the Inland Empire region enrolled 2,957 new students in 2011-2012. The distribution of new enrollments by program type was 41% ADN (n=1,213), 55.5% BSN (n=1,179), and 3.5% ELM (n=104). Approximately one-half (50.7%, n=1,499) of the new students in 2011-2012 enrolled at one of the region's public programs.

### New Student Enrollment by Program Type<sup>†</sup>

	<i>Academic Year</i>									
	<i>2002-2003</i>	<i>2003-2004</i>	<i>2004-2005</i>	<i>2005-2006</i>	<i>2006-2007</i>	<i>2007-2008</i>	<i>2008-2009</i>	<i>2009-2010</i>	<i>2010-2011</i>	<i>2011-2012</i>
<b>New Student Enrollment</b>	<b>1,117</b>	<b>1,153</b>	<b>1,189</b>	<b>1,519</b>	<b>1,946</b>	<b>1,907</b>	<b>2,496</b>	<b>2,884</b>	<b>2,774</b>	<b>2,957</b>
ADN	905	935	966	1,216	1,473	1,442	1,773	1,633	1,224	1,213
BSN	212	218	223	303	473	394	649	1,205	1,488	1,640
ELM					0	71	74	46	62	104
Private				182	242	316	934	1,364	1,346	1,458
Public	991	1,027	1,054	1,337	1,704	1,591	1,562	1,520	1,428	1,499

<sup>†</sup>2011-2012 data may be influenced by the allocation of satellite campus data from another region

### Student Census Data

A total of 5,553 students were enrolled in a pre-license nursing program in the Inland Empire region as of October 15, 2012. The 2012 census of the region's programs indicates that 37.3% (n=2,071) of students were enrolled in ADN programs, 59.2% (n=3,287) in BSN programs, and 3.5% (n=195) in ELM programs.

### Student Census Data\*<sup>†</sup>

<i>Program Type</i>	<i>Year</i>									
	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
ADN	1,553	1,784	1,927	2,109	2,336	2,471	2,834	2,809	2,224	2,071
BSN	599	636	656	759	964	1,104	1,702	1,847	3,257	3,287
ELM					63	125	151	124	105	195
<b>Total Nursing Students</b>	<b>2,152</b>	<b>2,420</b>	<b>2,583</b>	<b>2,868</b>	<b>3,363</b>	<b>3,700</b>	<b>4,687</b>	<b>4,780</b>	<b>5,586</b>	<b>5,553</b>

\*Census data represent the number of students on October 15<sup>th</sup> of the given year

<sup>†</sup>2012 data may be influenced by the allocation of satellite campus data from another region.

### Student Completions

Program completions at Inland Empire pre-license nursing programs totaled 1,960 in 2011-2012. The distribution of completions by program type was 51.9% ADN (n=1,019), 44.7% BSN (n=876), and 3.3% ELM (n=65).

### Student Completions<sup>†</sup>

	<i>Academic Year</i>									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
<b>Student Completions</b>	<b>751</b>	<b>956</b>	<b>999</b>	<b>1,002</b>	<b>1,137</b>	<b>1,300</b>	<b>1,582</b>	<b>2,011</b>	<b>1,757</b>	<b>1,960</b>
ADN	620	786	862	845	950	1,057	1,220	1,588	1,201	1,019
BSN	131	170	137	157	187	243	308	401	505	876
ELM					0	0	54	22	51	65

<sup>†</sup>2011-2012 data may be influenced by the allocation of satellite campus data from another region.

### Retention and Attrition Rates

Of the 1,600 students scheduled to complete an Inland Empire nursing program in the 2011-2012 academic year, 77.5% (n=1,240) completed the program on-time, 8.2% (n=131) are still enrolled in the program, and 14.3% (n=229) dropped out or were disqualified from the program.

### Student Retention and Attrition<sup>†</sup>

	<i>Academic Year</i>									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
<b>Students Scheduled to Complete the Program</b>	<b>1,076</b>	<b>1,353</b>	<b>1,272</b>	<b>1,112</b>	<b>1,121</b>	<b>1,271</b>	<b>1,637</b>	<b>1,833</b>	<b>1,627</b>	<b>1,600</b>
Completed On Time	667	970	886	792	805	924	1,138	1,382	1,242	1,240
Still Enrolled	198	170	130	116	129	160	256	259	138	131
Attrition	211	213	256	204	187	187	243	192	247	229
Completed Late <sup>‡</sup>								173	83	85
<b>Retention Rate*</b>	62.0%	71.7%	69.7%	71.2%	71.8%	72.7%	69.5%	75.4%	76.3%	77.5%
<b>Attrition Rate**</b>	19.6%	15.7%	20.1%	18.3%	16.7%	14.7%	14.8%	10.5%	15.2%	14.3%
<b>% Still Enrolled</b>	18.4%	12.6%	10.2%	10.4%	11.5%	12.6%	15.6%	14.1%	8.5%	8.2%

<sup>†</sup>2011-2012 data may be influenced by the allocation of satellite campus data from another region

<sup>‡</sup>Data were collected for the first time in the 2009-2010 survey. These completions are not included in the calculation of either the retention or attrition rates.

\*Retention rate = (students completing program on-time)/(students scheduled to complete)

\*\*Attrition rate = (students dropped or disqualified who were scheduled to complete)/(students scheduled to complete)

Note: Blank cells indicate the information was not requested in the given year.

Attrition rates among the region's pre-license nursing programs vary by program type. The average attrition rate was highest for the region's ELM programs in 2011-2012, and lowest for ADN programs. The average attrition rate was lower for the region's public programs compared to private programs.

#### Attrition Rates by Program Type\*†

Program Type	Academic Year									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
ADN	20.4%	16.7%	21.2%	19.5%	17.7%	15.7%	14.8%	10.3%	13.3%	13.3%
BSN	14.9%	9.9%	12.7%	12.6%	11.0%	9.9%	16.6%	10.2%	15.9%	15.2%
ELM							8.1%	19.1%	44.4%	23.2%
Private				19.6%	19.0%	17.5%	14.3%	8.3%	13.8%	17.7%
Public	20.1%	16.5%	20.4%	18.2%	16.5%	14.5%	15.0%	11.4%	15.7%	13.2%

\*Changes to the survey that occurred between 2003-2004 and 2005-2006 may have affected the comparability of these data over time.

†2011-2012 data may be influenced by the allocation of satellite campus data from another region

#### Retention and Attrition Rates for Accelerated Programs

The 2011-2012 average retention rate for accelerated programs in the Inland Empire was 89.5%, which is much higher than traditional programs. Similarly, the average attrition rate was 7.9%, which is considerably lower than the average rate for traditional programs.

#### Student Retention and Attrition for Accelerated Programs\*†

	Academic Year				
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
<b>Students Scheduled to Complete the Program</b>	<b>38</b>	<b>59</b>	<b>88</b>	<b>122</b>	<b>354</b>
Completed On Time	30	46	75	105	317
Still Enrolled	2	5	4	6	9
Attrition	6	8	9	11	28
Completed Late‡			6	14	27
<b>Retention Rate**</b>	78.9%	78.0%	85.2%	86.1%	89.5%
<b>Attrition Rate***</b>	15.8%	13.6%	10.2%	9.0%	7.9%
<b>% Still Enrolled</b>	5.3%	8.5%	4.5%	4.9%	2.5%

\*Retention and attrition data for accelerated programs were collected for the first time in 2007-2008.

†2011-2012 data may be influenced by the allocation of satellite campus data from another region.

‡Data were collected for the first time in 2009-2010 survey. These completions are not included in the calculation of either the retention or attrition rates.

\*\*Retention rate = (students completing program on-time)/(students scheduled to complete)

\*\*\*Attrition rate = (students dropped or disqualified who were scheduled to complete)/(students scheduled to complete)

Note: Blank cells indicated that the applicable information was not requested in the given year.

### NCLEX Pass Rates

Overall, NCLEX pass rates for graduates of the region's ADN and ELM programs have fluctuated within a narrow range over time and are similar to the pass rates for graduates of accelerated programs. NCLEX pass rates for graduates of the region's BSN programs have generally improved in the last ten years. In 2011-2012, the NCLEX pass rates by program type were 90.8% for ADN graduates, 83.1% for BSN graduates, and 92% for ELM graduates.

#### First Time NCLEX Pass Rates\*†

Program	Academic Year									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
ADN	90.2%	86.7%	92.7%	91.7%	92.6%	90.2%	89.2%	90.8%	86.5%	90.8%
BSN	76.8%	87.5%	73.0%	80.5%	78.9%	82.4%	84.4%	88.1%	86.1%	83.1%
ELM							89.5%	83.3%	93.0%	92.0%
Accelerated Programs**						77.8%	92.9%	91.4%	95.0%	90.1%

\*NCLEX pass rates for students who took the exam for the first time in the past five years.

†2011-2012 data may be influenced by the allocation of satellite campus data from another region

\*\*These data were collected for the first time in 2007-2008.

### Employment of Recent Nursing Program Graduates<sup>3</sup>

Hospitals represent the most frequently reported employment setting for recent graduates of pre-license programs in the Inland Empire. In 2011-2012, the region's programs reported that 71.8% of employed recent graduates were working in a hospital setting. Programs also reported that 13.7% of recent graduates had not found employment in nursing at the time of the survey. The 2011-2012 average regional share of new graduates employed in nursing in California was 74.6%.

#### Employment of Recent Nursing Program Graduates<sup>†</sup>

Employment Location	Academic Year							
	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Hospital	66.5%	81.1%	80.1%	93.7%	73.6%	75.0%	66.5%	71.8%
Long-term care facilities	0.4%	0.9%	2.1%	1.2%	4.4%	6.3%	4.4%	5.5%
Community/public health facilities	1.1%	0.9%	2.3%	2.8%	3.6%	3.3%	3.2%	2.7%
Other healthcare facilities	1.2%	1.7%	2.0%	2.3%	3.1%	3.8%	3.4%	2.0%
Other	0.3%	15.4%	1.3%	0.1%	2.6%	15.2%	3.8%	4.4%
Unable to find employment*						18.5%	11.6%	13.7%
Employed in California	65.4%	67.5%	70.5%	96.7%	77.9%	81.0%	78.7%	74.6%

†2011-2012 data may be influenced by the allocation of satellite campus data from another region

\*Data were added to the survey in 2009-2010

Note: Blank cells indicate the information was not requested in the given year

<sup>3</sup> Graduates whose employment setting was reported as "unknown" have been excluded from this table. In 2011-2012, on average, the employment setting was unknown for 12% of recent graduates.



### *Clinical Simulation in Nursing Education*

Between 8/1/11 and 7/31/12, 20 Inland Empire nursing schools reported using clinical simulation<sup>4</sup>. The most frequently reported reasons that schools in the region used a clinical simulation center in 2011-2012 were to provide clinical experience not available in a clinical setting and to standardize clinical experiences. Of the 20 schools that used clinical simulation centers in 2011-2012, 80% (n=16) plan to expand the center.

<b>Reasons for Using a Clinical Simulation Center*</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
To provide clinical experience not available in a clinical setting	70.0%	82.4%	90%	90%	80%
To standardize clinical experiences	70.0%	76.5%	85%	80%	80%
To check clinical competencies	80.0%	58.8%	75%	60%	60%
To make up for clinical experiences	90.0%	82.4%	60%	60%	65%
To increase capacity in your nursing program	10.0%	0.0%	10%	15%	15%
Number of schools that use a clinical simulation center	10	17	20	20	20

\*These data were collected for the first time in 2006-2007. However, changes in these questions for the 2007-2008 administration of the survey and lack of confidence in the reliability of the 2006-2007 data prevent comparability of the data. Therefore, data prior to 2007-2008 are not shown.

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<sup>4</sup> Clinical simulation provides a simulated real-time nursing care experience using clinical scenarios and low to hi-fidelity mannequins, which allow students to integrate, apply, and refine specific skills and abilities that are based on theoretical concepts and scientific knowledge. It may include videotaping, de-briefing and dialogue as part of the learning process.

*Clinical Space & Clinical Practice Restrictions<sup>5</sup>*

The number of Inland Empire pre-license nursing programs that reported they were denied access to a clinical placement, unit or shift decreased from 17 programs in 2010-11 to 15 programs in 2011-2012. More than half of the programs reported being denied access to clinical units (60.9%, n=14) in 2011-2012, while 47.8% (n=11) were denied access to a clinical placement. Approximately one-quarter (26.1%, n=6) of the region's programs were denied access to a clinical shift. Only 18.2% (n=2) of the programs that were denied access to clinical placements and 35.7% (n=5) of the programs were denied access to clinical units were offered an alternative by the clinical site. The majority of programs that were denied access to shifts (66.7%) were offered an alternative. The lack of access to clinical space resulted in a loss of 22 clinical placements, 26 units and 11 shifts, which affected 100 students.<sup>6</sup>

<b>Denied Clinical Space</b>	<b>2010-11</b>	<b>2011-12</b>
Programs Denied Clinical Placement	13	11
Programs Offered Alternative by Site	4	2
Placements Lost	23	22
Number of programs that reported	24	23
Programs Denied Clinical Unit	11	14
Programs Offered Alternative by Site	7	5
Units Lost	12	26
Number of programs that reported	24	22
Programs Denied Clinical Shift	8	6
Programs Offered Alternative by Site	6	4
Shifts Lost	21	11
Number of programs that reported	24	22
Total number of students affected	323	100

<sup>5</sup> Some of these data were collected for the first time in 2009-2010. However, changes in these questions for the 2010-2011 administration of the survey prevent comparability of the data. Therefore, data prior to 2010-2011 are not shown.

<sup>6</sup> Only 7 of the 15 programs that reported experiencing a loss of clinical placements, units, or shifts also reported the total number of students affected by the loss.

Overall, competition for space arising from an increase in the number of nursing students was the most frequently reported reason why Inland Empire programs were denied clinical space. In addition, programs frequently reported being denied clinical space for reasons related to nurse residency programs, and being displaced by another program. Being denied clinical space due to a decrease in patient census, or due to reasons related to nurse residency programs saw the greatest increase compared with the previous year.

<b>Reasons for Clinical Space Being Unavailable*</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
Competition for clinical space due to increase in number of nursing students in region	72.7%	64.7%	80.0%
Displaced by another program	72.7%	52.9%	53.3%
Staff nurse overload or insufficient qualified staff	63.6%	41.2%	46.7%
Nurse residency programs	27.3%	29.4%	60.0%
Closure, or partial closure, of clinical facility		23.5%	26.7%
No longer accepting ADN students	18.2%	17.6%	20.0%
Clinical facility seeking magnet status	45.5%	17.6%	33.3%
Change in facility ownership/management		11.8%	20.0%
Decrease in patient census	45.5%	11.8%	46.7%
Other	9.1%	0%	6.7%
<b>Number of programs that reported</b>	<b>11</b>	<b>17</b>	<b>15</b>

\*Data were collected for the first time in the 2009-2010 or 2010-2011 survey.

Note: Blank cells indicate that the applicable information was not requested in the given year.

Reasons for lack of access to clinical space vary by program. In 2011-2012, competition for space arising from an increase in the number of nursing students was reported as a predominant reason for unavailable clinical space among all program types. Being denied space due to reasons related to nurse residency programs was experienced more frequently by BSN and ELM programs. Clinical facilities seeking magnet status and being displaced by other programs were major barriers for ADN programs.

#### **Reasons for Clinical Space Being Unavailable, by Program Type, 2011-2012**

<b>Reasons for Clinical Space Being Unavailable</b>	<b>Program Type</b>			
	<b>ADN</b>	<b>BSN</b>	<b>ELM</b>	<b>Total</b>
Competition for clinical space due to increase in number of nursing students in region	62.5%	100%	100%	80.0%
Displaced by another program	62.5%	50.0%	0%	53.3%
Staff nurse overload or insufficient qualified staff	50.0%	33.3%	100%	46.7%
Nurse residency programs	50.0%	66.7%	100%	60.0%
Closure, or partial closure, of clinical facility	12.5%	33.3%	100%	26.7%
No longer accepting ADN students	37.5%	0%	0%	20.0%
Clinical facility seeking magnet status	62.5%	0%	0%	33.3%
Change in facility ownership/management	25.0%	16.7%	0%	20.0%
Decrease in patient census	37.5%	50.0%	100%	46.7%
Other	12.5%	0%	0%	6.7%
<b>Number of programs that reported</b>	<b>8</b>	<b>6</b>	<b>1</b>	<b>15</b>

Programs that lost access to clinical space were asked to report on the strategies used to cover the lost placements, sites, or shifts. The most frequently reported strategy (66.7%) was to replace the lost clinical space at a different site currently being used by the program. 60% of the programs also reported being able to replace lost space by adding a new clinical site, and 40% used clinical simulation to compensate for the loss of clinical space.

#### Strategies to Address the Loss of Clinical Space, 2011-2012\*

Strategy to Address Lost Clinical Space	2011-12
Replaced lost space at different site currently used by nursing program	66.7%
Added/replaced lost space with new site	60.0%
Clinical simulation	40.0%
Replaced lost space at same clinical site	20.0%
Reduced student admissions	13.3%
Other	0%
Number of programs that reported	15

\*Data were collected for the first time during the 2011-2012 survey.

65.2% (n=15) of nursing programs in the Inland Empire reported an increase in out-of-hospital clinical placements in 2011-2012. The most frequently reported non-hospital clinical site to see an increase in placements was a public health/community health agency, reported by 53.3% of all responding programs. This marks a 35.1% increase by comparison with last year.

Alternative Clinical Sites*	2010-11	2010-11
Medical practice, clinic, physician office	36.4%	33.3%
Renal dialysis unit	36.4%	13.3%
Skilled nursing/rehabilitation facility	27.3%	33.3%
Outpatient mental health/substance abuse	27.3%	26.7%
Home health agency/home health service	27.3%	13.3%
School health service (K-12 or college)	27.3%	26.7%
Hospice	27.3%	13.3%
Public health or community health agency	18.2%	53.3%
Surgery center/ambulatory care center	18.2%	13.3%
Correctional facility, prison or jail	18.2%	13.3%
Occupational health or employee health service	9.1%	0%
Case management/disease management	0%	6.7%
Urgent care, not hospital-based	0%	0%
Number of programs that reported	11	15

\*Data collected for the first time in 2010-2011

In 2011-2012, 19 of 21 schools (90.5%) in the Inland Empire reported that pre-licensure students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities. The most common types of restricted access students faced were to electronic medical records and bar coding medication administration, as well as access to the site itself due to a visit from an accrediting agency. Schools reported that it was uncommon to have students face restrictions on direct communication with health care team members, access to alternative settings due to liability issues, and to patients due to staff workload. Restricted student access to bar coding medication administration showed the biggest increase compared to the previous year.

Common Types of Restricted Access for RN Students	2009-10	2010-11	2011-12
Electronic Medical Records	76.5%	71.4%	78.9%
Clinical site due to visit from accrediting agency (Joint Commission)	58.9%	61.9%	63.2%
Bar coding medication administration	76.5%	57.1%	73.7%
Glucometers	47.1%	52.4%	57.9%
Student health and safety requirements		42.9%	52.6%
Automated medical supply cabinets	58.9%	38.1%	31.6%
Some patients due to staff workload		33.3%	15.8%
IV medication administration	29.5%	28.6%	26.3%
Alternative setting due to liability	11.8%	19.0%	15.8%
Direct communication with health team	5.9%	14.3%	5.3%
Number of schools that reported	17	21	19

Note: Blank cells indicated that the applicable information was not requested in the given year.

### Faculty Census Data<sup>7</sup>

On October 15, 2012, there were 985 total nursing faculty<sup>8</sup> in the Inland Empire. Of these faculty, 37.7% (n=371) were full-time and 62.3% (n=614) were part-time. In addition, there were 54 vacant faculty positions in the region. This represents a 5.2% faculty vacancy rate.

### Faculty Census Data<sup>†</sup>

	<i>Year</i>									
	2003	2004	2005*	2006*	2007*	2008	2009	2010	2011	2012
<b>Total Faculty</b>	<b>259</b>	<b>304</b>	<b>338</b>	<b>319</b>	<b>452</b>	<b>521</b>	<b>530</b>	<b>624</b>	<b>709</b>	<b>985</b>
<i>Full-time</i>	146	171	156	156	223	228	252	264	278	371
<i>Part-time</i>	113	133	127	163	229	293	278	360	431	614
<b>Vacancy Rate**</b>	<b>2.3%</b>	<b>0.3%</b>	<b>2.0%</b>	<b>3.0%</b>	<b>3.4%</b>	<b>4.9%</b>	<b>8.6%</b>	<b>7.1%</b>	<b>3.7%</b>	<b>5.2%</b>
<i>Vacancies</i>	6	1	7	10	16	27	50	48	27	54

<sup>†</sup>2012 data may be influenced by the allocation of satellite campus data from another region

\*The sum of full- and part-time faculty did not equal the total faculty reported in these years.

\*\*Vacancy rate = number of vacancies/(total faculty + number of vacancies)

In 2011-2012, 13 schools (61.9%) reported that their faculty work an overloaded schedule. Of these schools 92.3% (n=12) reported that faculty are paid extra for the overloaded schedule.

<b>Overloaded Schedules for Faculty*</b>	<i>Academic Year</i>			
	2008-09	2009-10	2010-11	2011-12
Schools with overloaded faculty	13	14	13	13
Share of schools that pay faculty extra for the overload	84.6%	85.7%	84.6%	92.3%
Total number of schools	19	21	21	21

\*Data were collected for the first time in 2008-2009

<sup>7</sup> Census data represent the number of faculty on October 15<sup>th</sup> of the given year.

<sup>8</sup> Since faculty may work at more than one school, the number of faculty reported may be greater than the actual number of individuals who serve as faculty in nursing schools in the region.

## *Summary*

Over the past decade, the number of Inland Empire pre-license nursing programs has nearly doubled, from 12 programs in 2002-2003 to 23 programs in 2011-2012. Since 2005-2006, the share of nursing programs that partner with other schools that offer programs that lead to a higher degree has increased from 7.1% to 43.5%.

New student enrollments among the region's programs have more than doubled in the last ten years. In 2011-2012 Inland Empire programs reported a total of 2,582 spaces available for new students, which were filled with a total of 2,957 students. Nursing programs in the region have enrolled more students than were spaces available in eight of the past ten years. Qualified applications to the region's programs in 2011-2012 totaled 6,094, 51.5% of which were not accepted for admission.

In 2011-2012, pre-license nursing programs in the Inland Empire reported 1,960 completions, nearly triple the number of completions reported ten years ago. However, if the current retention rate of 77.5% remains consistent, and if new student enrollments decline from their current level, the annual number of graduates from regional nursing programs is likely to decline in future years. At the time of the survey, 13.7% of recent graduates from Inland Empire nursing programs were unable to find employment in nursing.

Clinical simulation has become widespread in nursing education, and the majority of schools in the region plan to expand their use of clinical simulation in the coming year. Clinical simulation is seen by schools as an important tool for standardizing clinical experiences and for providing clinical experiences that are otherwise unavailable to students. The importance of clinical simulation is underscored by data showing an increase in out-of-hospital clinical placements. In addition, the majority of Inland Empire RN programs reported being denied access to clinical placement sites that were previously available to them and over 90% of nursing schools in the Inland Empire reported that their students had faced restrictions to specific types of clinical practice during the 2011-2012 academic year.

Expansion in RN education has required nursing programs to hire more faculty to teach the growing number of students. Although the number of nursing faculty has more than tripled in the past ten years, faculty hires are not keeping pace with growth of Inland Empire pre-licensure nursing programs. In 2012, 54 faculty vacancies were reported, representing a faculty vacancy rate of 5.2%.

**APPENDIX A – Inland Empire Nursing Education Programs****ADN Programs (12)**

Chaffey College  
College of the Desert  
Copper Mountain College  
Cypress College  
Everest College  
Golden West College  
Mount San Jacinto College  
Riverside City College  
Saddleback College  
San Bernardino Valley College  
Santa Ana College  
Victor Valley College

**BSN Programs (9)**

California Baptist University  
CSU Fullerton  
CSU San Bernardino  
Concordia University Irvine  
Loma Linda University  
University of California Irvine  
West Coast University – Inland  
West Coast University – Orange  
Western Governors University

**ELM Programs (2)**

California Baptist University  
CSU Fullerton

**Satellite Campus (2)**

Azusa Pacific University - BSN/ELM  
CSU San Marcos - BSN



## APPENDIX B – BRN Education Issues Workgroup Members

### **BRN Education Issues Workgroup Members**

#### **Members**

Loucine Huckabay, Chair  
 Audrey Berman  
 Liz Close  
 Brenda Fong  
 Patricia Girczyc  
 Marilyn Herrmann  
 Deloras Jones  
 Stephanie Leach  
 Judy Martin-Holland  
 Tammy Rice

#### **Organization**

California State University, Long Beach  
 Samuel Merritt University  
 Sonoma State University  
 Community College Chancellors Office  
 College of the Redwoods  
 Loma Linda University  
 California Institute for Nursing and Health Care  
 Kaiser Foundation Health Plan  
 University of California, San Francisco  
 Saddleback College

#### **Ex-Officio Member**

Louise Bailey                      California Board of Registered Nursing

#### **Project Manager**

Julie Campbell-Warnock              California Board of Registered Nursing